

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 02-075152

(43)Date of publication of application : 14.03.1990

1)Int.Cl.

H01M 2/16

1)Application number : 01-188995

(71)Applicant : EASTMAN KODAK CO

2)Date of filing : 24.07.1989

(72)Inventor : STEKLENSKI DAVID JOHN

0)Priority

Priority number : 88 223811 Priority date : 25.07.1988 Priority country : US

4) FUSIBLE SEPARATOR FOR LITHIUM BATTERY

7)Abstract:

PURPOSE: To manufacture a thin separator safely applicable to a lithium battery with a smaller number of processes by joining a nonwoven layer which is fusible at a predetermined temperature on a porous or minutely porous support body.

CONSTITUTION: A thin and strong support body is formed out of typically a minutely porous polypropylene film. A nonwoven layer is formed out of typically a wax or polymer which is soluble at melting points of 80 to 150°C for example sufficiently lower than the temperature of a battery in its critical state in which the layer itself is used as a composition of a separator q. The nonwoven layer is joined on the support body by means of the melt blow method or the like to form a thin separator in a reduced number of processes. The separator sufficiently separates both poles of a battery from each other and thus prevents a rise in temperature of the battery even upon a risk of firing due to a temperature rise thereof because of its melting prior to firing.

GAL STATUS

Date of request for examination]

Date of sending the examiner's decision of rejection]

Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

Date of final disposal for application]

Patent number]

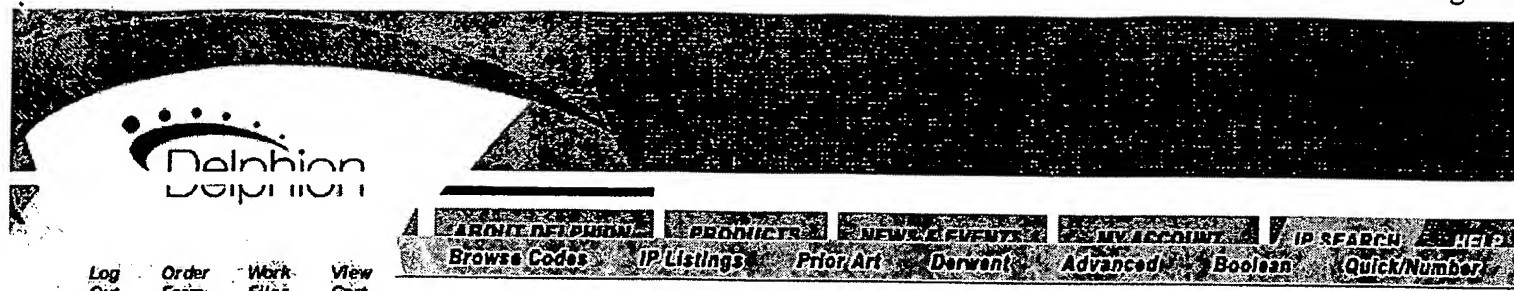
Date of registration]

Number of appeal against examiner's decision of
ejection]

Date of requesting appeal against examiner's
ecision of rejection]

Date of extinction of right]

Copyright (C); 1998,2000 Japan Patent Office



The Delphion
Integrated
View

Other Views:
[INPADOC](#)

Title: **JP2075152A2: FUSIBLE SEPARATOR FOR LITHIUM BATTERY**
 ► [Want to see a more descriptive title highlighting what's new about this](#)

Country: **JP** Japan
 Kind: **A**

Inventor(s): **STEKLENSKI DAVID JOHN**

[No Image](#)

Applicant/Assignee:

EASTMAN KODAK CO

Inquire Regarding
Licensing

[News, Profiles, Stocks and More about this company](#)

Issued/Filed Dates:

March 14, 1990 / July 24, 1989

Application Number:

JP1989000188995

IPC Class:

H01M 2/16;

Priority Number(s):

July 25, 1988 **US1988000223811**

Abstract:



Purpose: To manufacture a thin separator safely applicable to a lithium battery with a smaller number of processes by joining a nonwoven layer which is fusible at a predetermined temperature on a porous or minutely porous support body.

Constitution: A thin and strong support body is formed out of typically a minutely porous polypropylene film. A nonwoven layer is formed out of typically a wax or polymer which is soluble at melting points of 80 to 150°C for example sufficiently lower than the temperature of a battery in its critical state in which the layer itself is used as a composition of a separator q. The nonwoven layer is joined on the support body by means of the melt blow method or the like to form a thin separator in a reduced number of processes. The separator sufficiently separates both poles of a battery from each other and thus prevents a rise in temperature of the battery even upon a risk of firing due to a temperature rise thereof because of its melting prior to firing.

COPYRIGHT: (C)1990,JPO

► [See a clear and precise summary of the whole patent, in understandable terms.](#)

Family:

[Show known family members](#)

Other Abstract Info:

CHEMABS 112(18)162246T DERABS C90-031209

Foreign References:

[Show the 1 patents that reference this one](#)





Nominate this
for the Gallery...

[Subscribe](#) | [Privacy Policy](#) | [Terms & Conditions](#) | [FAQ](#) | [Site Map](#) | [Help](#) | [Contact Us](#)

© 1997 - 2002 Delphion Inc.